

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for classifying defects comprising:
imaging an object by illuminating and scanning an electron beam and detecting
with detectors;
extracting images of a defect candidate from images obtained by each of said
detectors at said imaging step and calculating defect information of said defect candidate, said
calculated defect information including defect surface shape information, pattern defect
information and voltage contrast defect information;
classifying said extracted defect candidate image into a first category relating to
criticality by using said calculated defect information;
classifying said extracted defect candidate image into a second category relating
to defect types; and
displaying on a screen said extracted plural defect candidate images ~~side-by-side
together with their first and second classification information, said first classification information
relating to said first category, said second classification information relating to said second
category in either a first display area or a second display area according to the defect type of each
of the extracted defect candidate images together with their classified information regarding the
first category and the second category, wherein the first display area corresponds to the first
category and the second display area corresponds to the second category;~~
wherein said step of classifying said extracted defect candidate image into said
second category is performed by comparing a circuit pattern area and a defect area, said circuit
pattern area being obtained from a reference image and said defect area being obtained from said
extracting step.

2-4. (Canceled)

5. (Previously presented) The method for classifying defects as described in claim 1 wherein said defect type includes one or more of the following: particle defects, flaw defects, circuit pattern short defects, and circuit pattern open defects.

6. (Currently amended) A method for classifying defects comprising:
imaging an object by illuminating and scanning an electron beam and detecting with detectors;
extracting images of a defect candidate from images obtained from said detectors and calculating defect information of said defect candidate, said calculated defect information including defect surface shape information, pattern defect information and voltage contrast defect information;
classifying said extracted defect candidate image into at least one defect type by using said calculated defect information;
evaluating criticality of defect of said defect candidate image that has been classified into said at least one defect type; and
displaying on a screen said extracted plural defect candidate images ~~side-by-side~~ in one of a plurality of areas divided by the defect type together with their first and second information, said first information relating to said classification of defect type, and said second information relating to said evaluation of said criticality of defect.

7. (Previously presented) The method for classifying defects as described in claim 6 wherein said imaging of said object is performed by illuminating and scanning an electron beam focused on said object and detecting, in synchronization with said scanning, secondary electrons generated from said object by said illumination.

8. (Original) The method for classifying defects as described in claim 6 wherein said defect types for classification include one or more of the following: particle defects, flaw defects, circuit pattern short defects, and circuit pattern open defects.

9. (Currently amended) A method for classifying defects comprising:
imaging an object by illuminating and scanning an electron beam and detecting
with detectors;
extracting defect candidates from images obtained by said detectors and
calculating defect information of said defect candidate;
classifying said extracted defect candidate images into a first category relating to
defect types by using said calculated defect information;
classifying said extracted defect candidate images into a second category relating
to defect criticality, said second category relating to a predicted yield from said inspected object;
and
displaying on a single screen a distribution on said inspected object of said defect
candidates classified in said first category in a map format together with ~~first and second~~
~~classification information, said first classification information relating to said first category, said~~
~~second information relating to said second category~~ defect candidate images of the first category
and/or second category together with their classified information regarding the first category and
the second category.

10. (Previously presented) The method for classifying defects as described in
claim 9 wherein said imaging of said object is performed by illuminating and scanning an
electron beam focused on said object and detecting, in synchronization with said scanning,
secondary electrons generated from said object by said illumination.

11-22. (Canceled)

23. (Previously presented) The method for classifying defects as described in
claim 1 further comprising forming an image based on said secondary electrons generated from
said inspected object by said illumination.

24. (Previously presented) The method for classifying defects as described in claim 7 further comprising forming an image based on said secondary electrons generated from said inspected object by said illumination.

25. (Previously presented) The method for classifying defects as described in claim 10 further comprising forming an image based on said secondary electrons generated from said inspected object by said illumination.

26. (Canceled)

27. (Previously presented) The method for classifying defects as described in claim 9 wherein said defect type includes particle defects, flaw defects, circuit pattern defects, and voltage contrast defects.

28-32. (Canceled)

33. (Previously presented) The method of claim 9, wherein said calculated defect information including defect surface shape information, pattern defect information and voltage contrast defect information.